Randolph County Regional Landfill

Transportation Impact Analysis



CDM Smith

Will Letchworth, PE

- Professional Engineer
- 10 years of experience
- Performed 100+ TIAs
- Extensive experience with landfills, quarries, and regional distribution facilities
 - Canadays Coal Ash Landfill
 - Jamestown Quarry
 - M&M Mars Truck Facility



Landfill Traffic

- Two Types
 - Residential
 - Commercial
- Residential is already on roadways
 - Accesses facility via County Land Road
- Commercial
 - 100 trucks per day
 - Accesses facility via Old Cedar Falls Road





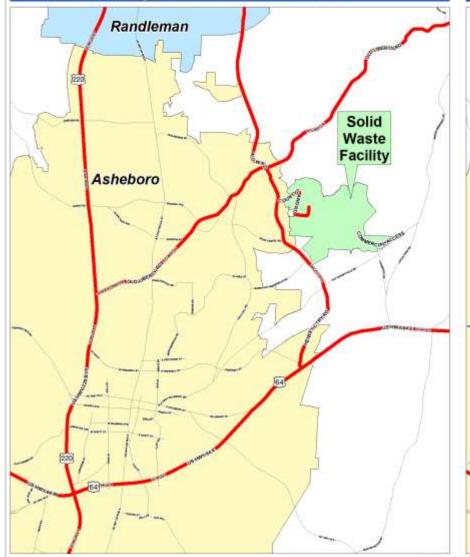


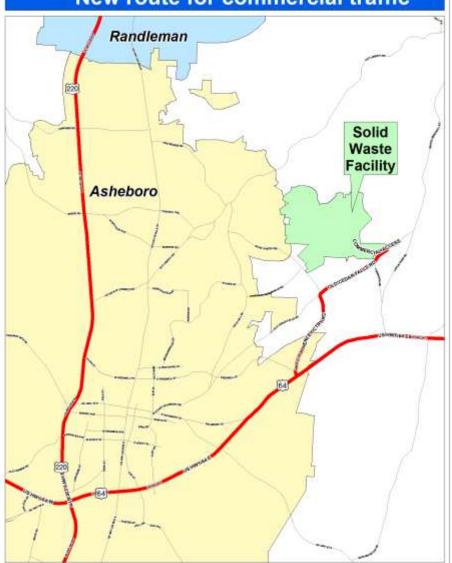


Transportation Routes for Proposed Regional Landfill

Existing route for all traffic

New route for commercial traffic

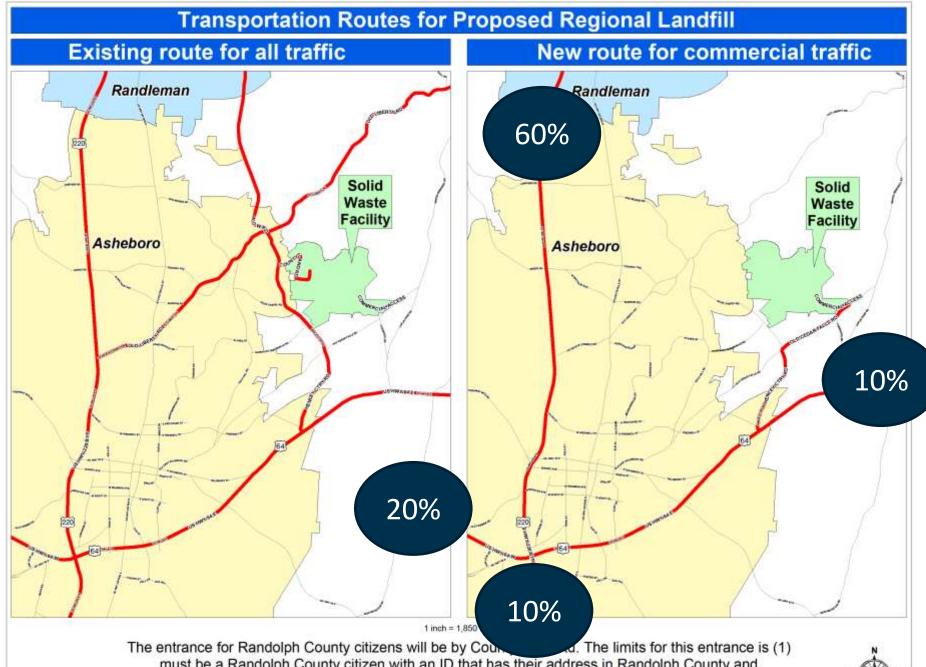




1 inch = 1.850 feet

The entrance for Randolph County citizens will be by County Land Rd. The limits for this entrance is (1) must be a Randolph County citizen with an ID that has their address in Randolph County and (2) the truck can be no larger than 3/4 ton (1,500 lbs.) All other vehicles will have to use the new entrance on Old Cedar Falls Rd.



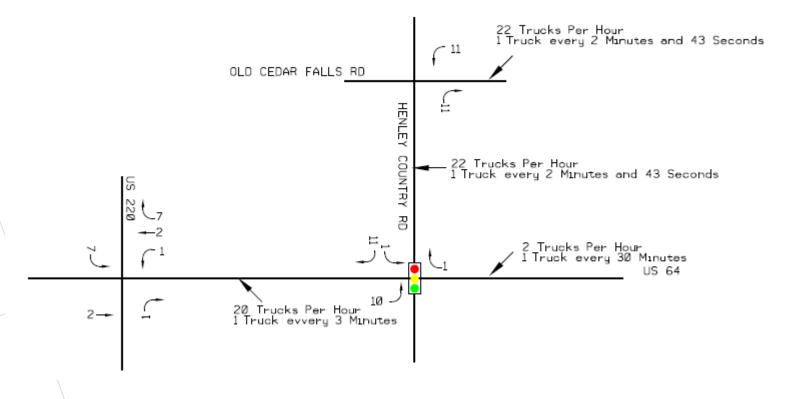


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- Roadway Capacity
 - All roadways along commercial routes well under capacity
 - Minor increases in overall traffic volume
- Roadway Geometrics
 - Typical rural roadway geometrics
 - Recommend 45 mph speed limit on Henley Country Road
- Location of Access Points
 - 2 options
 - Recommend left turn lane into site on Old Cedar Falls Road



- Truck Frequency
 - 100 trucks per day over 9 hours





Roadway	Highest Hourly Traffic Volume (sum of both directions)	Time Between Vehicles (seconds)	Time to Cross Roadway (seconds)
Henley Country Road	113	32	5.5
Old Cedar Falls Road	309	12	5.5

- Bridge Infrastructure
 - Existing bridges new
 - No impact from commercial vehicles
- Vehicle Accidents
 - Awaiting data
 - No significant visual evidence of accidents that would be affected by trucks



- School Bus Traffic
 - Morning busses operate before landfill opens
 - No overlap with Randolph County School System routes in afternoon
- Farming Operations
 - No substantial impact to farming operations



Recommendations

- Post speed limit of 45 mph on Henley Country Road
- Consider eastbound left turn lane at facility access
- Place entrance gate with sufficient queuing distance



Conclusion

 Based on the date compiled, site visits, nationally accepted roadway design and safety criteria, it is our professional opinion that the additional traffic generated by the proposed landfill will not materially endanger public safety

